

AMENDMENTS IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Claims 1-33 are currently pending.

Claim 1 (Currently Amended): A removable device, which is attached/detached to/from a universal peripheral device interface of a computer executing a prescribed automatic startup script or an auto-starting program stored in a device of a specified type when the device is connected thereto and includes control means thereto, comprising:

a controller; and

a ROM or a read/writable storage device as its main storage device, wherein

the control means controller includes

~~a plurality of unit devices including a first unit device and a second unit device,~~

~~hub means allocator~~ for allocating data exchange with the computer side to each of the ~~a plurality of unit devices including a first unit device and a second unit device~~, and

a transmitter means which, upon connection to the universal peripheral device interface, first, sends a first signal simulating a device of [[the]] a specified type in which an automatic startup script or an auto-starting program is stored in the storage device and executed by the computer to which the device is attached, on account of the first unit device, and then, at a specified timing, sends the computer a second specified signal used for accepting recognition on account of the second unit device.

Claim 2 (Currently Amended): The removable device according to claim 1, wherein:

the removable stores an auto-starting program invoked by the automatic startup script or the auto-starting program, and

the auto-starting program supplies the ~~control means~~ controller an instruction that causes the computer to recognize the second unit device when a user is authenticated by password by the computer,

supplies the ~~control means~~ controller an instruction to format data in the second unit device when an incorrect password is entered a specified number of times during the authentication, and

periodically sends specified recognition extension signals to the ~~control means~~ controller, and

the ~~control means~~ controller includes

~~means a data formatter~~ for executing the formatting instruction and

~~means a canceller~~ for canceling the recognition of the second unit device by the computer when the recognition extension signals are interrupted for specified period of time.

Claim 3 (Currently Amended): [[A]] The removable device according to claim 1, further comprising: which is attached/detached to/from a universal peripheral device interface of a computer executing a prescribed automatic startup script or an auto-starting program stored in a device of a specified type when the device is connected thereto and includes control means and a ROM or a read/writable storage device as its main storage device, wherein

the removable device includes means

a connector for connecting another peripheral device, and

the control means controller includes

means a data allocator for setting up all or part of the main storage device as a first unit device and the other peripheral device as a second unit device and allocating data exchange with the computer side to each of the unit devices, and

means which, upon connection to the universal peripheral device interface, first, sends a signal simulating a device of the specified type on account of the first unit device, and then, at a specified timing, sends the computer a specified signal used for accepting recognition on account of the second unit device.

Claim 4 (Currently Amended): [[A]] The removable device according to claim 1, which is attached/detached to/from a universal peripheral device interface of a computer and includes control means and a ROM or a read/writable storage device as its main storage device, wherein:

the removable device includes means for connecting another peripheral device, and

the control means controller includes

means for setting up all or part of the main storage device as a first unit device and the other peripheral device as a second unit device and allocating data exchange with the computer to each of the unit devices, and

means a signal transmitter which, upon connection to the universal peripheral device

interface, first, sends a specified signal used for accepting recognition on account of the first unit device, and, when a program read and executed from the recognized first unit device sends a specified cue signal, sends the computer a specified signal used for accepting recognition on account of the second unit device.

Claim 5 (Currently Amended): The removable device according to ~~any of claims 1 to 4~~
claim 1, wherein

the auto-starting program acquires a drive letter of each of the unit devices on the computer and transmits the same to the removable device.

Claim 6 (Currently Amended): A removable device comprising device, comprising:
a rewritable non-volatile memory memory; and
~~control means~~ a controller for mediating access from a USB host side to the memory,
wherein:

the ~~control means~~ controller
upon connection to the host side, connects a portion of the memory to the host side, and
upon reception of a specified cue signal from the host, connects another portion of the memory to the host side.

Claim 7 (Currently Amended): A control circuit mediating, as a USB client, access from a host side via USB to a rewritable non-volatile memory, wherein

the circuit includes:
a slave side connection port for external device connection,
~~means~~ a region manager for partitioned management of the memory as a plurality of regions,

~~simulated hub means~~ a hub simulator for connecting and disconnecting the regions and external devices, which are connected to the slave side connection port, to and from the host as a plurality of unit devices divided by the hub, and

a command ~~interpretation means~~ interpreter for detecting and executing dedicated command sent from the host side and including at least command for connection of any of the unit devices.

Claim 8 (Original): The control circuit according to claim 7, wherein a simulated CD-ROM format-compatible region is used as one of the regions, and in case the host side accesses the simulated CD-ROM format-compatible region configured in the non-volatile memory using the CD-ROM format, the circuit performs conversion between such access and access in the non-volatile memory format.

Claim 9 (Currently Amended): The control circuit according to ~~claims 7 or 8~~ claim 7, further comprising:

an invisible region different from the regions provided with the help of the partitioned management in the non-volatile memory, and access to information in the invisible region is authorized exclusively based on the dedicated command.

Claim 10 (Currently Amended): The control circuit according to ~~any of claims 7 to 9~~ claim 7, wherein:

the command ~~interpretation means~~ interpreter detects the dedicated command when bit patterns corresponding to the parameters and type of the command are stored in a specified register region provided in the memory, and places a result of command execution into a specified register region in the form of bit patterns.

Claim 11 (Currently Amended): The control circuit according to ~~any of claims 7 to 10~~
claim 7, wherein:

the command ~~interpretation means~~ interpreter detects, with respect to the dedicated command, patterns corresponding to their parameters and the type of the commands from accesses to specified contents, specified file names, specified physical addresses in any of the unit devices, any of the unit devices, or the hub.

Claim 12 (Currently Amended): The control circuit according to ~~any of claims 7 to 11~~
claim 9, wherein at least any of the following is performed in accordance with the type of the dedicated command.

- (a) connecting, disconnecting, and acquiring a status of unit devices
- (b) reading and writing information to the invisible region
- (c) reading individually specific identifying information
- (d) modifying region volume
- (e) Rewriting and updating the simulated CD-ROM format-compatible region.

Claim 13 (Currently Amended): The control circuit according to ~~any of claims 8 to 12~~
claim 8, further comprising:

a switch port for switching connection of the simulated CD-ROM format-compatible region to the host side on and off.

Claim 14 (Currently Amended): The control circuit according to ~~any of claims 8 to 13~~
claim 8, wherein the CD-ROM format-compatible region is connected to the host side whenever
a command to initialize external devices connected to the slave side connection port is not sent
from the host side within a certain time after connection to the host.

Claim 15 (Currently Amended): The control circuit according to ~~any of claims 6 to 14~~
claim 7, wherein data recorded in a specified region of the non-volatile memory is encrypted and
data read therefrom is decrypted.

Claim 16 (Currently Amended): A removable device comprising a control circuit
according to ~~any of claims 7 to 15~~ claim 7 and a switch used to select whether a peripheral
device connected to the slave side connection port is immediately connected to the host side.

Claim 17 (Currently Amended): The removable device according to ~~any of claims 1 to 6~~
~~or 16~~ claim 1, further comprising:

means a first connector for connecting a mobile phone terminal using a wired or
wireless connection; and

means a second connector for connecting the same to a telephone network via an IP
connection provided on a computer operating as a host side.

Claim 18 (Currently Amended): A firmware program for a control circuit of a removable
device which is attached/detached to/from a universal peripheral device interface of a computer
executing a specified automatic startup script or an auto-starting program stored in a device of a

specified type when the device is connected thereto and includes control means and a ROM or a read/writable storage device as its main storage device, wherein:

the program causes the control circuit

to allocate data exchange with the computer to a plurality of unit devices including a first unit device and a second unit device, and

upon connection to the universal peripheral device interface, first, to send a first signal simulating a device of the specified type in which an automatic startup script or auto-starting program is stored in the storage device and executed by a computer to which the device is attached, on account of the first unit device, and then, at a specified timing, to send the computer a specified second signal used for accepting recognition on account of the second unit device.

Claim 19 (Original): A firmware program for a control circuit mediating, as a USB client, access from the host side via USB to a rewritable non-volatile memory, wherein

the program causes the control circuit

to carry out partitioned management of the memory as a plurality of regions,

to connect and disconnect the regions and external devices connected to the slave side connection port used for external device connection, to and from the host side as a plurality of unit devices divided by the hub, and

to detect and execute dedicated command sent from the host and including at least connection of any of the unit devices.

Claim 20 (Original): The firmware program for a control circuit according to claim 19, wherein the program causes the control circuit to provide an invisible region different from the regions in the non-volatile memory with the help of the partitioned management, and access to information in the invisible region is authorized exclusively based on the dedicated command.

Claim 21 (Currently Amended): [[A]] The firmware program according to claim 19, for a control circuit mediating, as a USB client, access from a host side via USB to a rewritable non-volatile memory, wherein

the program causes the control circuit to perform partitioned management of the memory as a plurality of regions and an invisible region that is different from these regions and has a specified password stored therein, to connect, upon connection to the host side, one of the regions to the host side as a single device connected to the hub, and to connect another region of the regions to the host as another device connected to the hub when a specified dedicated command is sent from the host side or when a password sent from the host side matches the specified password stored in the invisible region.

Claim 22 (Currently Amended): The firmware program for a control circuit according to any of claims 19 to 24 claim 19, wherein

the program causes the control circuit

to detect the dedicated command when bit patterns corresponding to the parameters and type of the command is stored in a specified register region provided in the memory, and to place a result of command execution into a specified register region as a bit pattern.

Claim 23 (Currently Amended): The firmware program for a control circuit according to ~~any of claims 19 to 22~~ claim 19, wherein

the program causes the control circuit to detect, with respect to the dedicated command, patterns corresponding to their parameters and the type of the commands from accesses to specified contents, specified file names, specified physical addresses in any of the unit devices, any of the unit devices, or the hub.

Claim 24 (Currently Amended): The firmware program for a control circuit according to ~~any of claims 19 to 23~~ claim 19, wherein

the program causes the control circuit to encrypt data recorded in a specified region of the non-volatile memory and to decrypt data read therefrom.

Claim 25 (Currently Amended): An information processing method in a control circuit of a removable device implementing ~~any of the following:~~ a removable device according to ~~any of claims 1 to 6, 16, and 17~~, a control circuit according to ~~any of claims 7 to 15~~, or a firmware program for a control circuit according to ~~any of claims 18 to 24~~ claim 1.

Claim 26 (Currently Amended): A circuit design pattern for a control circuit of a removable device implementing ~~any of the following: [[a]] the removable device according to any of claims 1 to 6, 16, and 17, a control circuit according to any of claims 7 to 15, or a firmware program for a control circuit according to any of claims 18 to 24 claim 1.~~

Claim 27 (Currently Amended): A removable device which is attached/detached to/from a universal peripheral device interface of a computer executing a specified auto-starting program stored in a device of a specified type when the device is connected thereto, comprising:
~~and includes control means a controller; and~~
a ROM or a read/writable storage device as its main storage device, wherein
the auto-starting program is stored in main storage device in advance,
the ~~control means controller~~ includes ~~means a transmitter~~ for accepting recognition by sending the computer a signal simulating a device of the specified type in which the auto-starting program is stored in the storage device and executed by the computer to which the device is attached, upon connection to the universal peripheral device interface, and
the auto-starting program, along with causing the computer to display, on its screen, a graphic element used for displaying a web page, causes the computer to display a corresponding web page in response to specified operations of selecting the graphic element.

Claim 28 (Original): The removable device according to claim 27, wherein the graphic element is stored in a specified protected storage region.

Claim 29 (Currently Amended): The removable device according to claim [[2]] 28, wherein:

the specified protected storage region is realized by the ~~control means~~ controller including:
~~hub means~~ an allocator which, along with managing the main storage device by dividing it into a plurality of unit devices including a first unit device storing the auto-starting program and a second unit device storing the graphic elements, allocates data exchange with the computer to the unit devices, and

~~means~~ a signal transmitter which, first, sends the computer a signal simulating a device of the specified type on account of the first unit device and then authorizes access to the second unit device only for as long as specified signals are sent from the automatically started auto-starting program.

Claim 30 (Currently Amended): The removable device according to ~~any of claims 1 to 3~~ claim 27, wherein the auto-starting program, based on access to a predetermined server system, acquires at least one of information identifying the web page, and information concerning the graphic elements.

Claim 31 (Currently Amended): A log-in method for logging in from a client system into a web server system, ~~wherein~~ comprising:

storing information specifying the web server system and log-in information for user identification and authentication utilized for logging into the web server system ~~is stored~~ on [[the]] a client system in advance, and, advance;

at the time of the log-in, ~~is sent~~ sending them from the client system to a specified relay server, [[and]]

~~the relay server transfers~~ transferring the log-in information to the web server system[[,]] by the relay server; and

~~the web server system~~, via the relay server, causing a web browser provided on the client system to reflect a user-specific starting URL by the web server system, when the user is successfully authenticated by the log-in information.

Claim 32 (Currently Amended): The log-in method according to claim [[5]] 31,
wherein further comprising:

sending updated information used for accessing a web page ~~is sent~~ from the relay server to the client system logged into the web server system, and

~~the client system~~, along with detecting the arrival of the updated ~~information and~~ information, announcing it by displaying it on screen, and accepting ~~accepts~~ operations for access to the web page.

Claim 33 (New): A removable device, which is attached/detached to/from a universal peripheral device interface of a computer executing a prescribed automatic startup script or an auto-starting program stored in a device of a specified type when the device is connected thereto, comprising:

control means; and

a ROM or a read/writable storage device as its main storage device, wherein the control means includes

hub means for allocating data exchange with the computer to each of a plurality of unit devices including a first unit device and a second unit device, and

means which, upon connection to the universal peripheral device interface, first, sends a first signal simulating a device of a specified type in which an automatic startup script or an auto-starting program is stored in the storage device and executed by the computer to which the device is attached, on account of the first unit device, and then, at a specified timing, sends the computer a second signal used for accepting recognition on account of the second unit device.